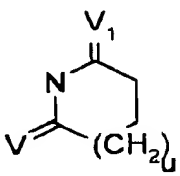
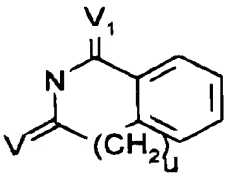
$-O(CH_2)_r-NT_2$, in which r is 2, 3, or 4 and T is hydrogen or C_{1-6} alkyl or it forms with the adjacent nitrogen a group



or



in which V and V_1 are independently hydrogen or oxygen and u is 0,1 or 2;
$-O(CH_2)_s-OW_2$ in which s is 2, 3, or 4 and W is hydrogen or C_{1-6} alkyl; hydroxyalkyl, aminoalkyl, mono-or di-alkylaminoalkyl, acylamino, alkylsulphonylamino, aminoacylamino, mono- or di-alkylaminoacylamino; with up to four R_3 substituents being present in the quinoline nucleus;

R_4 is hydroxy;

R_5 is branched or linear C_{1-6} alkyl, C_{3-7} cycloalkyl, C_{4-7} cycloalkylalkyl, optionally substituted aryl, wherein an optional substituent is hydroxy, halogen, C_{1-6} alkoxy or C_{1-6} alkyl, or an optionally substituted single or fused ring heterocyclic group, having aromatic character, containing from 5 to 12 ring atoms and comprising up to four hetero-atoms in the or each ring selected from S, O, N;

X is O, S, or N-C≡N.

REMARKS

This Amendment is made after receiving a Notice of Allowance and under the provisions of 37 C.F.R. §312. The amendments made herein either correct minor typographical errors, or inadvertent errors in defining one or more of the variables of the compounds of formula (I) or formula (Ib). Applicants submit that the case remains in condition for allowance.

Specifically, the amendments made herein are as follows:

1) In claim 11, the compound (R,S)-N-[α-(methoxycarbonyl)benzyl]-N-methyl-2-phenylquinoline-4-carboxamide, has been deleted as it is a tertiary amine, and therefore not consistent with the other compounds claimed herein;

2) In claim 19, the definition of R_1 was deleted since claim 19 depends from claim 60, wherein the compound of formula (Ib) does not contain a variable R_1, rather simply a hydrogen in that position;

3) The term "compositions" in claim 24 was placed in the correct singular format;

4) The definition of variable R_1 in claim 59 was clarified by indicating that R_1 together with R_2 can form a ring structure;

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5) The definition of R_1 was deleted in claim 60 since no variable R_1 exists for compounds of formula (Ib); and

6) The definition of variable R_1 in claim 61 was clarified by indicating that R_1 together with R_2 can form a ring structure.

Applicants invite the Examiner to contact the undersigned attorney if questions arise concerning the above amendments.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

11. (Amended) A compound according to claim 59 selected from the group consisting of:

(R,S)-N-(α-methylbenzyl)-2-phenylquinoline-4-carboxamide;
(+)-(S)-N-(α-methylbenzyl)-2-phenylquinoline-4-carboxamide;
(-)-(R)-N-(α-methylbenzyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-phenylquinoline-4 carboxamide;
(+)-(S)-N-[α-(methoxycarbonyl)benzyl]-2-phenylquinoline-4-carboxamide;
(-)-(R)-N-[α-(methoxycarbonyl)benzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-7-methoxy-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-7-hydroxy-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(carboxy)benzyl]-7-methoxy-2-phenylquinoline-4-carboxamide hydrochloride;
(R,S)-N-[α-(methylaminocarbonyl)benzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-thienyl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-furyl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(4-pyridyl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)-2-thienylmethyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonylmethyl)benzyl]-2-phenylquinoline-4-carboxamide;
(-)-(R)-N-[α-(methoxycarbonyl)-1,4-cyclohexadienylmethyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(1-hydroxyethyl)benzyl]-2-phenylquinoline-4-carboxamide single diast;
(R,S)-N-(α-ethylbenzyl)-3-methoxy-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-n-butyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]benzo-1,3-cycloheptadieno[1,2-b]quinoline-8-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-hexyl-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-methyl-2-phenylquinoline-4-carboxamide;
(+)-(R)-N-(α-ethylbenzyl)-3-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-methoxyphenyl)quinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-phenyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-fluorophenyl)quinoline-4-carboxamide;
(R,S)-N-[α-(ethyl)-3,4-dichlorobenzyl]-2-phenylquinoline-4-carboxamide;

(R,S)-N-[α-(hydroxymethyl)benzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-3-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-7-chloro-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-6-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxymethyl)benzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-6-chloro-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-3-ethyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-n-propylbenzyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-ethyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-phthalimido-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-n-propyl-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-6-bromo-3-methyl-2-(4-bromophenyl)quinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-6-bromo-3-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-6-methoxy-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-benzofuryl)quinoline-4-carboxamide;
(R,S)-N-[(1,2-diphenyl)ethyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-trifluoromethylbenzyl)-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-methoxy-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-ethyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(ethyl)-4-chlorobenzyl]-2-phenylquinoline-4-carboxamide;
[(R,S)-N-[α-(methoxycarbonyl)benzyl]-N-methyl-2-phenylquinoline-4-carboxamide;]
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(3-thienyl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-5,6-dihydrobenzo[a]acridine-7-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-pyrryl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-thiazolyl)quinoline-4-carboxamide;
(R,S)-N-(1-indanyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-n-butylbenzyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(4-methylphenyl)quinoline-4-carboxamide;
(R,S)-N-(α-heptylbenzyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-methylphenyl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(4-methoxyphenyl)quinoline-4-carboxamide;

N-(1-phenylcyclopentyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(4-hydroxyphenyl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(3,4-methylendioxyphenyl)quinoline-4-carboxamide;
N-(α,α-dimethylbenzyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(ethyl)-4-methylbenzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(3-pyrryl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(3,4-dichlorophenyl)quinoline-4-carboxamide;
(-)-(R)-N-[α-(aminomethyl)benzyl]-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-amino-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-chloro-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-bromo-2-phenylquinoline-4-carboxamide;
(R,S)-N-(α-*iso*-propylbenzyl)-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-2-phenylquinoline-4-carboxamide;
(+)-(R)-N-(α-ethylbenzyl)-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-6-fluoro-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-cyclohexylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(3-chlorophenyl)quinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2-chlorophenyl)quinoline-4-carboxamide;
(R,S)-N-(α-ethylbenzyl)-3-hydroxy-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-8-acetyloxy-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-8-hydroxy-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(2,4-dichlorophenyl)quinoline-4-carboxamide;
(-)-(R)-N-[α-(methoxycarbonyl)-4-hydroxybenzyl]-2-phenylquinoline-4-carboxamide hydrochloride;
N-diphenylmethyl-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-hydroxy-2-phenylquinoline-4-carboxamide;
(+)-(R)-N-(α-ethylbenzyl)-3-hydroxy-2-phenylquinoline-4-carboxamide;
(-)-(R)-N-[α-(methoxycarbonyl)benzyl]-3-hydroxy-2-phenylquinoline-4-carboxamide;
(-)-(R)-N-[α-(dimethylaminomethyl)benzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(dimethylaminocarbonyl)benzyl]-2-phenylquinoline-4-carboxamide;

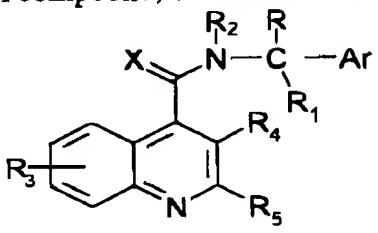
(R,S)-N-[α-(aminocarbonyl)benzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(1-pyrrolidinylcarbonyl)benzyl]-2-phenylquinoline-4-carboxamide;
(-)-(R)-N-[α-(carboxy)benzyl]-2-phenylquinoline-4-carboxamide hydrochloride;
(R,S)-N-[α-(methoxycarbonyl)benzyl]-2-(4-chlorophenyl)quinoline-4-carboxamide;
(R)-N-[α-(methoxycarbonyl)-4-methoxybenzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methoxycarbonyl)-α-(methyl)benzyl]-N-methyl-2-phenylquinoline-4-carboxamide hydrochloride;
(R,S)-N-[α-(methylcarbonyl)benzyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(2-hydroxyethyl)benzyl]-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-(2-dimethylaminoethoxy)-2-phenylquinoline-4-carboxamide hydrochloride;
(-)-(S)-N-(α-ethylbenzyl)-3-acetylamino-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-3-(3-dimethylaminopropoxy)-2-phenylquinoline-4-carboxamide hydrochloride;
(-)-(S)-N-(α-ethylbenzyl)-3-[2-(1-phthaloyl)ethoxy]-2-phenylquinoline-4-carboxamide hydrochloride;
(-)-(S)-N-(α-ethylbenzyl)-3-(2-aminoethoxy)-2-phenylquinoline-4-carboxamide hydrochloride;
(+)-(S)-N-(α-ethylbenzyl)-3-[2-(1-pyrrolidinyl)ethoxy]-2-phenylquinoline-4-carboxamide hydrochloride;
(-)-(S)-N-(α-ethylbenzyl)-3-(dimethylaminoacetylamino)-2-phenylquinoline-4-carboxamide;
N-(α,α-dimethylbenzyl)-3-hydroxy-2-phenylquinoline-4-carboxamide;
N-(α,α-dimethylbenzyl)-3-amino-2-phenylquinoline-4-carboxamide;
(-)-(S)-N-(α-ethylbenzyl)-5-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(1-hydroxyethyl)benzyl]-3-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(methylcarbonyl)benzyl]-3-methyl-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(ethyl)-4-pyridylmethyl]-2-phenylquinoline-4-carboxamide;
(R,S)-N-[α-(ethyl)-2-thienylmethyl]-2-phenylquinoline-4-carboxamide;
(+)-(S)-N-(α-ethylbenzyl)-3-dimethylaminomethyl-2-phenylquinoline-4-carboxamide hydrochloride;
(S)-N-(α-ethylbenzyl)-3-methyl-7-methoxy-2-phenylquinoline-4-carboxamide;
(S)-N-(α-ethylbenzyl)-3-amino-5-methyl-2-phenylquinoline-4-carboxamide; and
(S)-N-(α-ethylbenzyl)-3-methoxy-5-methyl-2-phenylquinoline-4-carboxamide[;] .

19. (Three Times Amended) A compound according to claim 60, or a salt or solvate thereof, in which:

Z is phenyl, 2-chlorophenyl, 2-thienyl or cyclohexadienyl;
R is methyl, ethyl, n-propyl, -COOMe, or -COMe;
[R_1 and] R_2 [are each] is hydrogen or methyl;
R_3 is hydrogen, methoxy, or hydroxy;
R_4 is hydrogen, methyl, ethyl, methoxy, hydroxy, amino, chlorine, bromine, dimethylaminoethoxy, 2-(1-phthaloyl)ethoxy, aminoethoxy, 2-(1-pyrrolidinyl)ethoxy, dimethylaminopropoxy, dimethylaminoacetylamino, acetylamino, or dimethylaminomethyl; and
Y is phenyl, 2-thienyl, 2-furyl, 2-pyrryl, 2-thiazolyl or 3-thienyl.

24. (Amended) A pharmaceutical [compositions] composition comprising a compound according to claim 23 or a pharmaceutically acceptable a salt or solvate thereof and a pharmaceutically acceptable carrier.

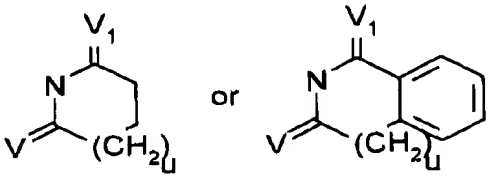
59. (Amended) A compound, or solvate or salt thereof, of formula (I):



(I)

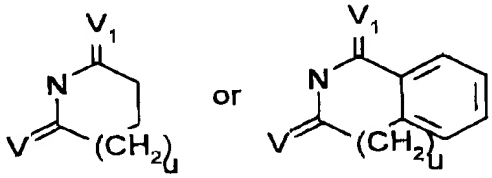
in which:
Ar is an optionally substituted phenyl group, or a naphthyl or C_{5-7} cycloalkdienyl group, or an optionally substituted single or fused ring heterocyclic group, having aromatic character, containing from 5 to 12 ring atoms and comprising up to four hetero-atoms in the or each ring selected from S, O, N;
R is linear or branched C_{1-8} alkyl, C_{3-7} cycloalkyl, C_{4-7} cycloalkylalkyl, an optionally substituted phenyl group or a phenyl C_{1-6} alkyl group, an optionally substituted five-membered heteroaromatic ring comprising up to four heteroatoms selected from O and N, hydroxy C_{1-6} alkyl, amino C_{1-6} alkyl, C_{1-6} alkylaminoalkyl, di C_{1-6} alkylaminoalkyl, C_{1-6} acylaminoalkyl, C_{1-6} alkoxyalkyl, C_{1-6} alkylcarbonyl, carboxy, C_{1-6} alkoxyxcarbonyl, C_{1-6} alkoxycarbonyl C_{1-6} alkyl, aminocarbonyl, C_{1-6} alkylaminocarbonyl, di C_{1-6} alkylaminocarbonyl, halogeno C_{1-6} alkyl; or is a group -$(CH_2)_p$- when cyclized onto Ar, where p is 2 or 3;
R_1 is hydrogen or C_{1-6} linear or branched alkyl, or together with R_2 form a -(CH_2)n- group in which n represents 3, 4, or 5; or R_1 together with R forms a group -$(CH_2)_q$-, in which q is 2, 3, 4 or 5;
R_2 is hydrogen;

R_3 is hydrogen, C_{1-6} linear or branched alkyl, C_{1-6} alkenyl, aryl, C_{1-6} alkoxy, hydroxy, halogen, nitro, cyano, carboxy, carboxamido, sulphonamido, C_{1-6} alkoxycarbonyl, trifluoromethyl, acyloxy, phthalimido, amino, mono- and di-C_{1-6} alkylamino, $-O(CH_2)_r-NT_2$, in which r is 2, 3, or 4 and T is hydrogen or C_{1-6} alkyl or it forms with the adjacent nitrogen a group



in which V and V_1 are independently hydrogen or oxygen and u is 0,1 or 2; $-O(CH_2)_s-OW_2$ in which s is 2, 3, or 4 and W is hydrogen or C_{1-6} alkyl; hydroxyalkyl, aminoalkyl, mono-or di-alkylaminoalkyl, acylamino, alkylsulphonylamino, aminoacylamino, mono- or di-alkylaminoacylamino; with up to four R_3 substituents being present in the quinoline nucleus;

R_4 is C_{1-6} linear or branched alkyl, C_{1-6} alkenyl, aryl, C_{1-6} alkoxy, hydroxy, halogen, nitro, cyano, carboxy, carboxamido, sulphonamido, C_{1-6} alkoxycarbonyl, trifluoromethyl, acyloxy, phthalimido, amino, mono- and di-C_{1-6} alkylamino, $-O(CH_2)_r-NT_2$, in which r is 2, 3, or 4 and T is hydrogen or C_{1-6} alkyl or it forms with the adjacent nitrogen a group



in which V and V_1 are independently hydrogen or oxygen and u is 0,1 or 2; $-O(CH_2)_s-OW_2$ in which s is 2, 3, or 4 and W is hydrogen or C_{1-6} alkyl; hydroxyalkyl, aminoalkyl, mono-or di-alkylaminoalkyl, acylamino, alkylsulphonylamino, aminoacylamino, mono- or di-alkylaminoacylamino; with up to four R_3 substituents being present in the quinoline nucleus;

or R_4 is a group $-(CH_2)_t-$ when cyclized onto R_5 as aryl, in which t is 1, 2, or 3;

R_5 is branched or linear C_{1-6} alkyl, C_{3-7} cycloalkyl, C_{4-7} cycloalkylalkyl, optionally substituted aryl, wherein an optional substituent is hydroxy, halogen, C_{1-6} alkoxy or C_{1-6} alkyl, or an optionally substituted single or fused ring heterocyclic group, having aromatic character, containing from 5 to 12 ring atoms and comprising up to four hetero-atoms in the or each ring selected from S, O, N;

X is O, S, or N-C≡N.

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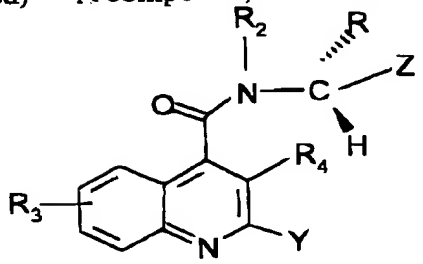
60. (Amended) A compound, or solvate or salt thereof, of formula (Ib):



(Ib)

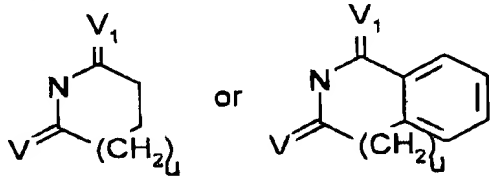
in which:

R is linear or branched C_{1-8} alkyl, C_{3-7} cycloalkyl, C_{4-7} cycloalkylalkyl, an optionally substituted phenyl group or a phenyl C_{1-6} alkyl group, an optionally substituted five-membered heteroaromatic ring comprising up to four heteroatoms selected from O and N, hydroxy C_{1-6} alkyl, amino C_{1-6} alkyl, C_{1-6} alkylaminoalkyl, di C_{1-6} alkylaminoalkyl, C_{1-6} acylaminoalkyl, C_{1-6} alkoxyalkyl, C_{1-6} alkylcarbonyl, carboxy, C_{1-6} alkoxyxcarbonyl, C_{1-6} alkoxycarbonyl C_{1-6} alkyl, aminocarbonyl, C_{1-6} alkylaminocarbonyl, di C_{1-6} alkylaminocarbonyl, halogeno C_{1-6} alkyl; or is a group -$(CH_2)_p$- when cyclized onto Ar, where p is 2 or 3;

[R_1 is hydrogen or C_{1-6} linear or branched alkyl, or together with R_2 form a -(CH_2)n- group in which n represents 3, 4, or 5; or R_1 together with R forms a group -$(CH_2)_q$-, in which q is 2, 3, 4 or 5;]

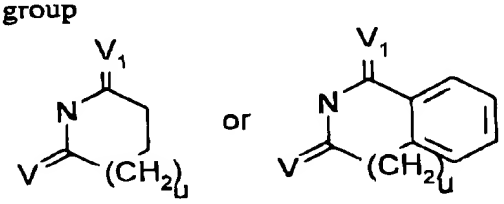
R_2 is hydrogen;

R_3 is hydrogen, C_{1-6} linear or branched alkyl, C_{1-6} alkenyl, aryl, C_{1-6} alkoxy, hydroxy, halogen, nitro, cyano, carboxy, carboxamido, sulphonamido, C_{1-6} alkoxycarbonyl, trifluoromethyl, acyloxy, phthalimido, amino, mono- and di-C_{1-6} alkylamino, -$O(CH_2)_r$-NT_2, in which r is 2, 3, or 4 and T is hydrogen or C_{1-6} alkyl or it forms with the adjacent nitrogen a group



in which V and V_1 are independently hydrogen or oxygen and u is 0,1 or 2; -$O(CH_2)_s$-OW_2 in which s is 2, 3, or 4 and W is hydrogen or C_{1-6} alkyl; hydroxyalkyl, aminoalkyl, mono-or di-alkylaminoalkyl, acylamino, alkylsulphonylamino, aminoacylamino, mono- or di-alkylaminoacylamino; with up to four R_3 substituents being present in the quinoline nucleus;

R_4 is C_{1-6} linear or branched alkyl, C_{1-6} alkenyl, aryl, C_{1-6} alkoxy, hydroxy, halogen, nitro, cyano, carboxy, carboxamido, sulphonamido, C_{1-6} alkoxycarbonyl, trifluoromethyl, acyloxy, phthalimido, amino, mono- and di-C_{1-6} alkylamino, $-O(CH_2)_r-NT_2$, in which r is 2, 3, or 4 and T is hydrogen or C_{1-6} alkyl or it forms with the adjacent nitrogen a group



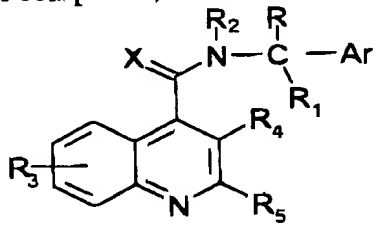
in which V and V_1 are independently hydrogen or oxygen and u is 0,1 or 2; $-O(CH_2)_s-OW_2$ in which s is 2, 3, or 4 and W is hydrogen or C_{1-6} alkyl; hydroxyalkyl, aminoalkyl, mono-or di-alkylaminoalkyl, acylamino, alkylsulphonylamino, aminoacylamino, mono- or di-alkylaminoacylamino; with up to four R_3 substituents being present in the quinoline nucleus;

or R_4 is a group $-(CH_2)_t-$ when cyclized onto R_5 as aryl, in which t is 1, 2, or 3;

Z is phenyl or phenyl substituted by hydroxy, halogen, C_{1-6} alkoxy, C_{1-6} alkyl or Z is a single or fused ring heterocyclic group, having aromatic character, containing from 5 to 12 ring atoms and comprising up to four hetero-atoms in the or each ring selected from S, O, N or Z is C_{5-7} cycloalkdienyl; and

Y is C_{3-7} cycloalkyl, phenyl or phenyl substituted by hydroxy, halogen, C_{1-6} alkoxy, or C_{1-6} alkyl, or Y is a single or fused ring heterocyclic group, having aromatic character, containing from 5 to 12 ring atoms and comprising up to four hetero-atoms in the or each ring selected from S, O, N.

61. (Amended) A compound, or solvate or salt thereof, of formula (I):



(I)

in which:

Ar is an optionally substituted phenyl group, or a naphthyl or C_{5-7} cycloalkdienyl group, or an optionally substituted single or fused ring heterocyclic group, having aromatic character, containing from 5 to 12 ring atoms and comprising up to four hetero-atoms in the or each ring selected from S, O, N;

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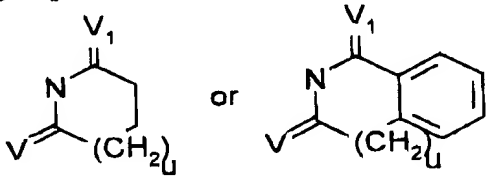
R is linear or branched C_{1-8} alkyl, C_{3-7} cycloalkyl, C_{4-7} cycloalkylalkyl, an optionally substituted phenyl group or a phenyl C_{1-6} alkyl group, an optionally substituted five-membered heteroaromatic ring comprising up to four heteroatoms selected from O and N, hydroxy C_{1-6} alkyl, amino C_{1-6} alkyl, C_{1-6} alkylaminoalkyl, di C_{1-6} alkylaminoalkyl, C_{1-6} acylaminoalkyl, C_{1-6} alkoxyalkyl, C_{1-6} alkylcarbonyl, carboxy, C_{1-6} alkoxyxcarbonyl, C_{1-6} alkoxycarbonyl C_{1-6} alkyl, aminocarbonyl, C_{1-6} alkylaminocarbonyl, di C_{1-6} alkylaminocarbonyl, halogeno C_{1-6} alkyl; or is a group $-(CH_2)_p-$ when cyclized onto Ar, where p is 2 or 3;

R_1 is hydrogen or C_{1-6} linear or branched alkyl, or together with R_2 form a $-(CH_2)n-$ group in which n represents 3, 4, or 5; or R_1 together with R forms a group $-(CH_2)_q-$, in which q is 2, 3, 4 or 5;

R_2 is hydrogen;

R_3 is hydrogen, C_{1-6} linear or branched alkyl, C_{1-6} alkenyl, aryl, C_{1-6} alkoxy, hydroxy, halogen, nitro, cyano, carboxy, carboxamido, sulphonamido, C_{1-6} alkoxycarbonyl, trifluoromethyl, acyloxy, phthalimido, amino, mono- and di-C_{1-6} alkylamino, $-O(CH_2)_r-NT_2$, in which r is 2, 3, or 4 and T is hydrogen or C_{1-6} alkyl or it forms with the adjacent nitrogen a group



in which V and V_1 are independently hydrogen or oxygen and u is 0,1 or 2; $-O(CH_2)_s-OW_2$ in which s is 2, 3, or 4 and W is hydrogen or C_{1-6} alkyl; hydroxyalkyl, aminoalkyl, mono-or di-alkylaminoalkyl, acylamino, alkylsulphonylamino, aminoacylamino, mono- or di-alkylaminoacylamino; with up to four R_3 substituents being present in the quinoline nucleus;

R_4 is hydroxy;

R_5 is branched or linear C_{1-6} alkyl, C_{3-7} cycloalkyl, C_{4-7} cycloalkylalkyl, optionally substituted aryl, wherein an optional substituent is hydroxy, halogen, C_{1-6} alkoxy or C_{1-6} alkyl, or an optionally substituted single or fused ring heterocyclic group, having aromatic character, containing from 5 to 12 ring atoms and comprising up to four hetero-atoms in the or each ring selected from S, O, N;

X is O, S, or N-C≡N.